

## REFLECTIONS ON TWO CLAIMS OF ID

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**ID Claim #1:** *The design inference: There are patterns in nature which are best explained by the action of an indeterminate intelligent design agent.*

William Dembski's explanatory filter of an event or object:

1. Is it a high probability event? If yes, it is explained by necessity or natural law. If no, go to #2.
2. Is it an intermediate probable event? If yes, it is explained by chance or a combination of necessity and chance. If no, go to #3.
3. Is it a specified event of small probability? If yes, it was caused by intelligent design. If no, it is a combination of necessity and chance.

Michael Scriven's "retrospective causal analysis:"

In addition to passing the explanatory filter, "in order to establish a causal claim, the historical scientist needs: (1) 'evidence that his candidate cause was present' and (2) evidence that 'it has on other occasions clearly demonstrated its capacity to produce an effect of the sort here under study.'...and (3) an 'absence of evidence...of...other causes.'" (Meyer, *Signature in the Cell*, p. 166) In other words, in order to infer that a design agent caused a design, one must independently establish the existence and/or uniqueness, and the adequacy of the designer.

1. Causal adequacy
  - a. Meyer: "Since intelligent agency has 'demonstrated its capacity to produce' specified information," an intelligent agent is adequate.
  - b. However, no intelligent agent has ever been demonstrated to produce DNA information, i.e. life from non-life. Furthermore no scientific study can be done on the capacity of an indeterminate design agent to produce information.
2. Causal existence
  - a. Meyer pleads the exception—uniqueness instead of existence
  - b. However, the cause must be shown to exist before it can be unique
  - c. Circular reasoning: if causal existence must be demonstrated independently for a design inference to be valid, such inference cannot be used to infer existence
3. Causal uniqueness
  - a. Meyer claims all other hypotheses have been ruled out
  - b. Granted, no theory exists for explaining the development of life from non-life. But natural selection of replicating systems cannot be ruled out.

In other words, a design inference can be a proper scientific conclusion if it involves a class of design agents whose existence and methodology of design can be independently verified and studied in a scientific manner. A design inference is not useful for inferring the existence of an otherwise unknown class of design agent.

All Christians believe that God exists and is the creator of all things. Hence, causal existence and adequacy are known and the ID design inference is clearly seen to be true. But it is not a scientific conclusion since only faith provides the assurance of causal existence and adequacy.

**ID claim #2:** *DNA-information is complex specified information; all other complex specified information is known to be generated by intelligent beings; therefore DNA-information must have been generated by an intelligent agent.*

Information is physical (Rolf Landauer, 1970's)

All information is stored or transmitted in a physical embodiment

The information capacity of a physical system is given by Shannon's theorem:

$I = \log_2(1/p)$  where  $p$  is the probability of the physical system

Example 1: How much information can be stored in 4 tossed coins?

A.  $I = 4$  bits ("bits" is the abbreviation for "binary digits") for 16 possibilities

Example 2: What is the information capacity of US phone numbers?

A.  $I = 34$  bits (40 are typically used) for 9-10 billion numbers

The physical characteristic required to convey information is called complexity.

It is related to the concept physicists call configurational entropy

Complex information means information content where  $p$  is very very small (no chance events)

Information is specified when it has relevance or application with a particular meaning or function.

Example: A random phone number is not specific; your phone number is specified because it is uniquely identified with your phone.

Complex specified information (CSI) is information that is both complex and specific in the sense of being non-trivial and having meaning or function.

"Although a computer program may be similar to DNA in many respects and dissimilar in others, it exhibits a precise identity to DNA insofar as both contain specified complexity or specified information." (Meyer, *Signature in the Cell*, p. 386)

However, Meyer fails to account for the significance of different sources of specificity:

1. Abstractly designed information derives its specificity from a meaning or significance arbitrarily attributed to a physical configuration by an intelligent being.

All abstractly designed information has a physical embodiment but is independent of the physical system in which it is embodied.

Example 1: the shape "A" means the first letter of the English alphabet whether in chalk or ink or light; any other shape could have been chosen

Example 2: in a binary system, heads may represent a 1 and tails a 0 or vice versa

This type of complex specified information is only generated by intelligent beings.

2. Functional information derives its specificity from functionality and not abstraction.

Functional information depends uniquely on the physical and chemical properties of the material configuration that comprises the functional form.

Functional configurations can either be designed by intelligent beings or they can be generated by natural processes.

Example 1: A tool like a hand axe is a functional configuration designed by humans.

Example 2: Oklo natural nuclear reactors were functioning 1.7 billion years ago

Natural selection in replicating systems preferentially preserves functional configurations.

DNA is functional information since its specificity depends on its chemical attributes. A DNA sequence can be communicated by humans with abstract representations, but the basic information is specified by its functionality. It therefore does not require the source to be an intelligent agent.